

**Notice of Allowability**

Application No.

10/717,955

Applicant(s)

VU, HA C.

Examiner

Art Unit

Hai L. Nguyen

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 02/22/05.
2. ☒ The allowed claim(s) is/are 1-4, 6-15 and 17-20.
3. ☒ The drawings filed on 20 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TIMOTHY P. CALLAHAN  
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800

Part of Paper No./Mail Date 20050501

**DETAILED ACTION*****Response to Amendment***

1. The amendment received on 02/22/2005 has been received and entered in the case. The prior art rejections to the claims made in the previous Office Action mailed on 12/01/2004 are now withdrawn in view of Applicant's amendments. The case is found to be in allowance condition.

**REASON FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose or suggest a circuit (300 in instant Fig.3) for dividing periodic input pulses (clkin) by a preset integer M (PLLDIV) ), and a method of use, thereof, as recited in claims 1 and 10, comprising a dual modulus prescaler; a swallow counter (330); a program counter (320); and specifically the limitation directed to the dual modulus prescaler (310) arranged to receive periodic input pulses and to count the received input pulses for generating prescaled pulses, wherein one prescaled pulse is generated for every  $Q^{\text{th}}$  input pulse, wherein Q is a division modulus having a value depending on a value of a modulus control signal, wherein when a prescaled pulse is generated from a selected input pulse, the modulus control signal is ignored at least until after the onset of a next input pulse is received. Note that as shown in present application (FIG. 9), a period of time, CPD9 962, occurs from the  $M^{\text{th}}$  pulse of signal clkin (faster) to the falling edge of modulus control signal DIV4, where  $M=(P*N+S)$ . As shown in the figure, time CPD9 962 is sufficiently large that the next pulse ( $(M+1)^{\text{th}}$  pulse) of signal clkin (faster) occurs prior to the falling edge of modulus control signal DIV4.

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However, the prescaler ignores modulus control signal DIV4 at the onset of the  $(M+1)^{\text{th}}$  pulse of signal clkin (faster) (see page 8, lines 27-30 of the specification). Accordingly, in this embodiment, the fact that time CPD9 962 has not elapsed by the onset of the  $(M+1)^{\text{th}}$  pulse is irrelevant. Because the modulus control signal is ignored by the prescaler until after the onset of the next pulse after the  $M^{\text{th}}$  pulse (where the  $M^{\text{th}}$  pulse is the  $(P*N+S)^{\text{th}}$  pulse), the period of input signal clkin may be less than period of time CPD9 962 (which is the period of time from the  $(P*N+S)^{\text{th}}$  pulse of input signal clkin to the falling edge of modulus control signal DIV4).

Claim 9 similarly allowed; note the above discussion with regard to claims 1 and 10.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HLN 

May 1, 2005